

131 CPA 3724 \$  
FISH & RICHARDSON P.C.



45 Rockefeller Plaza  
Suite 2800  
New York, New York  
10111

Telephone  
212 765-5070

Facsimile  
212 258-2291

Frederick P. Fish  
1855-1930

W.K. Richardson  
1859-1951

March 20, 1998

Attorney Docket No.: 07807/116001

**Box CPA**

Assistant Commissioner for Patents  
Washington, DC 20231

This paper is a request for a continuation under 37 C.F.R. 1.53(d) of:

Applicant: Peter Bauer and Herbert Happe  
Title: METHOD AND APPARATUS FOR CUTTING  
BODIES HAVING A NON-CIRCULAR CROSS  
SECTION

Prior U.S. application no: 08/659,046  
Filing Date: 06/03/96

The prior application was complete as defined by 37 CFR 1.51(b), or was a national stage of an international application filed in compliance with 35 USC §371.

The prior application was filed after June 8, 1995.

This request for a CPA is the reference to the prior application noted above as required by 35 USC §120. Kindly abandon the prior application in favor of the continued proceedings that are requested herein.

Kindly enter the unentered amendment which was previously filed on 01/20/98, but was not entered in the prior prosecution of this case.

"EXPRESS MAIL" Mailing Label Number EH51027129565

Date of Deposit March 20, 1998  
I hereby certify under 37 CFR 1.10 that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office To Addressee" with sufficient postage on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Francisco Robles

Francisco Robles

03/23/1998 SLUANG 00000030 08659046  
01 FC:131 790.00 DP

FISH & RICHARDSON P.C.

March 20, 1998

Page 2

The prior application is assigned of record to Synthes (U.S.A.), a Pennsylvania partnership, by virtue of an assignment submitted to the Patent and Trademark Office for recording on 06/03/96 at 8018/0237.

This request includes 2 sheets, and the following:

Enclosures:

- Postcard

The entire disclosure of the prior application is part of this application and is incorporated by reference.

Basic filing fee	790.00
Total claims in excess of 20 times \$22.00	0.00
Independent claims in excess of 3 times \$82.00	0.00
Fee for Multiple dependent claims	0.00
Total filing fee:	\$ 790.00

A check for the filing fee is enclosed. Please apply any other required fees or any credits to deposit account 06-1050, referencing the attorney docket number shown above.

If this application is found to be incomplete, or if a telephone conference would otherwise be helpful, please call the undersigned at 212/765-5070.

Kindly acknowledge receipt of this application by returning the enclosed postcard.


Please send all correspondence to:

John B. Pegram  
Fish & Richardson P.C.  
45 Rockefeller Plaza  
Suite 2800  
New York, NY 10111

Respectfully submitted,



Richard P. Ferrara  
Reg. No. 30,632  
Enclosures

Please type a plus (+) inside this box → 

PTO/SB/29 (12/97)

Approved for use through 09/30/00. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# CONTINUED PROSECUTION APPLICATION (CPA) REQUEST TRANSMITTAL

Submit an original, and a duplicate for fee processing.  
(Only for Continuation or Divisional applications under 37 CFR 1.53(d))

CHECK BOX, if applicable

☐ DUPLICATE



Address to:

Assistant Commissioner for Patents - CPA  
Washington, DC 20231

Attorney Docket No. 8932-309

First Named Inventor Bauer, Paul

Express Mail Label No.

Total Pages 2

This is a request for a ☒ continuation or ☐ divisional application under 37 CFR 1.53 (d), (continued prosecution application (CPA)) of prior application number 08/659,046, filed on June 3, 1996, entitled METHOD AND APPARATUS FOR CUTTING BODIES HAVING NON-CIRCULAR CROSS-SECTION.

## NOTES

**FILING QUALIFICATIONS:** The prior application identified above must be a nonprovisional application that is either: (1) complete as defined by 37 CFR 1.51(b) or (2) the national stage of an international application in compliance with 35 U.S.C. 371. A Notice will be placed on a patent issuing from a CPA, except for reissues and designs, to the effect that the patent issued on a CPA and is subject to the twenty-year patent term provisions of 35 U.S.C. § 154(a)(2). Therefore, the prior application of a CPA may have been filed before, on or after June 8, 1995.

**C-I-P NOT PERMITTED:** A continuation-in-part application cannot be filed as a CPA under 37 CFR 1.53(d), but must be filed under 37 CFR 1.53(b).

**EXPRESS ABANDONMENT OF PRIOR APPLICATION:** The filing of this CPA is a request to expressly abandon the prior application as of the filing date of the request for a CPA. 37 CFR 1.53(b) must be used to file a continuation, divisional, or continuation-in-part of an application that is not to be abandoned.

**ACCESS TO PRIOR APPLICATION:** The filing of this CPA will be construed to include a waiver of confidentiality by the applicant under 35 U.S.C. 122 to the extent that any member of the public who is entitled under the provisions of 37 CFR 1.14 to access to, copies of, or information concerning, the prior application may be given similar access to, copies of, or similar information concerning, the other application or applications in the file jacket.

**35 U.S.C. 120 STATEMENT:** In a CPA, no reference to the prior application is needed in the first sentence of the specification and none should be submitted. If a sentence referencing the prior application is submitted, it will not be entered. A request for a CPA is the specific reference required by 35 U.S.C. 120 and to every application assigned the application number identified in such request, 37 CFR 1.78(a).

1. ☐ Enter the unentered amendment previously filed on \_\_\_\_ under 37 CFR 1.116 in the prior nonprovisional application.
2. ☒ A preliminary amendment is enclosed.
3. ☐ This application is filed by fewer than all the inventors named in the prior application, 37 CFR 1.53 (d)(4).
  - a. ☐ **DELETE** the following inventor(s) named in the prior nonprovisional application:
  - b. ☐ The inventor(s) to be deleted are set forth on a separate sheet attached hereto.
4. ☒ A new power of attorney or authorization of agent (PTO/SB/81) is enclosed.
5. ☐ Information Disclosure Statement (IDS) is enclosed:  
☐ PTO-1449  
☐ Copies of IDS Citations

RECEIVED

MAY 01 2001

TECHNOLOGY CENTER R3700

CLAIMS	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
	TOTAL CLAIMS (37 CFR 1.16(c))	22 — 20 =	2	\$ 18	= ... \$ 36.00
	INDEPENDENT CLAIMS (37 CFR 1.16(b))	3 — 3 =	0	\$ 80	= \$ 0.00
	MULTIPLE DEPENDENT CLAIMS (if applicable) (37 CFR 1.16(d))			\$270	
		0		BASIC FEE (37 CFR 1.16(a))	710.00
				Total of above Calculations =	746.00
				Reduction by 50% for filing by small entity (Note 37 CFR 1.9, 1.27, 1.28).	-
				TOTAL=	\$ 746.00

## 6. Small entity status:

- a. ☐ A small entity statement is enclosed.  
b. ☐ A small entity statement was filed in the prior nonprovisional application and such status is still proper and desired.

c. ☐ Is no longer claimed

☒ A petition for extension of time is enclosed.

The Commissioner is hereby authorized to credit overpayments or charge fees to Deposit Account No. 16-1150:

- a. ☒ Fees required under 37 CFR 1.16.  
b. ☐ Fees required under 37 CFR 1.17.  
c. ☐ Fees required under 37 CFR 1.18.  
d. ☒ Fees required under 37 CFR 1.136.  
☐ A check in the amount of \$\_\_ is enclosed.  
☐ Other: .....

**NOTE:**

**The prior application's correspondence address will carry over to this CPA UNLESS a new correspondence address is provided below.**

**10. NEW CORRESPONDENCE ADDRESS**

☐ Customer Number or Bar Code Label

20582

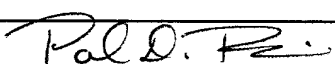
(Insert Customer No. or Attach bar code label here)

or ☐ New correspondence address below

NAME					
ADDRESS					
CITY		STATE		ZIP CODE	
COUNTRY		TELEPHONE		FAX	

**11. SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED**

**PENNIE & EDMONDS LLP**

NAME	Paul D. Bianco For: Brian M. Poissant	REG. NO. 43,500 REG. NO. 28,462
SIGNATURE		
DATE	APRIL 26, 2001	

08/65 90 46

## FISH &amp; RICHARDSON P.C.

FISH RICHARDSON & NEAVE  
BOSTON  
(1916-1969)

45 ROCKEFELLER PLAZA, SUITE 2800  
NEW YORK, NEW YORK 10111

FREDERICK P. FISH  
(1855-1930)

TELEPHONE 212/765-5070  
FAX 212/258-2291

W.K. RICHARDSON  
(1859-1951)

BOSTON  
617/542-5070  
WASHINGTON, D.C.  
202/783-5070

HOUSTON  
713/629-5070

SILICON VALLEY  
415/322-5070

TWIN CITIES  
612/335-5070

SOUTHERN CALIFORNIA  
619/678-5070

June 3, 1996

Attorney Docket No.: 07807/006001

**BOX PATENT APPLICATION**

Commissioner of Patents and Trademarks  
Washington, DC 20231

Presented for filing is a new continuation-in-part patent application of:

Applicant: PETER BAUER AND HERBERT HAPPE  
Title : METHOD AND APPARATUS FOR CUTTING BODIES HAVING A NON-CIRCULAR CROSS SECTION

Enclosed are the following papers, including all those required for a filing date under 37 CFR §1.53(b):

Pages of Specification	7
Pages of Claims	2
Pages of Abstract	1
Pages of Declaration	7
Sheets of Drawing	6

Under 35 USC §120, this application claims the benefit of prior U.S. application 08/508,255, filed July 27, 1995.

Basic filing fee	750.00
Total claims in excess of 20 times \$22.00	0.00
Independent claims in excess of 3 times \$78.00	156.00
Multiple dependent claims	0.00
Total filing fee:	\$ 906.00

A check for the filing fee is enclosed. Please charge any other required fees, or apply any credits, to Deposit Account No. 06-1050, referencing the Attorney Docket number shown above.

"EXPRESS MAIL" Mailing Label Number EG 654282249 US

Date of Deposit June 3, 1996

I hereby certify under 37 CFR 1.10 that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office To Addressee" with sufficient postage on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

L Dale Maher

\_\_\_\_\_

June 3, 1996

If this application is found to be INCOMPLETE, or if it appears that a telephone conference would helpfully advance prosecution, please telephone the undersigned at 212/765-5070.

Respectfully submitted,

Respectfully submitted,  
*Caspar C. Schneider*  
Caspar C. Schneider, Jr.  
Reg. No. 16,676

[illegible]

**APPLICATION**  
**FOR**  
**UNITED STATES LETTERS PATENT**

**TITLE:**

**METHOD AND APPARATUS FOR CUTTING BODIES HAVING  
A NON-CIRCULAR CROSS SECTION**

**APPLICANT:**

**PETER BAUER AND HERBERT HAPPE**

"EXPRESS MAIL" Mailing Label Number EB 654282249US

Date of Deposit June 3, 1996

I hereby certify under 37 CFR 1.10 that this correspondence is being deposited with the United States Postal Service as "Express Mail Post Office To Addressee" with sufficient postage on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

L. Dale Maher

*a*

~~METHOD AND APPARATUS FOR CUTTING BODIES~~  
HAVING A NON-CIRCULAR CROSS SECTION

*Classed 65*

This application is a continuation-in-part of our copending application Serial No. 08/508,255 filed July 27, 1995.

*Not checked*

Field of the Invention

The invention concerns a procedure for cutting bodies having a non-circular cross section; a tool for cutting such bodies; and the cut body so produced.

Background of the Invention

For cutting osteosynthetic plates in surgery, a cutting procedure using a cutting tool such as a shears or a cutting pliers is primarily used. Such a tool is known, for example, from DE-C1 43 08 319. Considerable force must be applied to cut through the osteosynthetic plates. In particular, the force applied by cutting pliers such as that referred to is very great, and the cut edges of the bone plates are deformed, or end up with a seam.

The present invention is intended to provide a procedure and a tool for cutting osteosynthetic plates without excessive force while insuring a clean, non-deformed cut edge.

Summary of the Invention

In accordance with the invention, the problem referred to is solved by cutting the plate or other body using torsion applied



by means of a tool having an upper shearing part and a lower shearing part, each having a cutting edge in direct contact with one another and having means for rotating said parts about an axis coincidental with the axis of the body to be cut.

The bodies to be cut can have any non-circular cross section, e.g. a cylindrical or prismatic cross section. In the following description, the procedure will be set forth using osteosynthetic plates with an approximately rectangular cross section. However, it will be understood that the invention may be used with other cross sections. Preferably, plates to which the invention is applied will have transverse division lines or indentations along their longitudinal axes into which the cutting tool can be placed.

A tool according to the invention comprises upper and lower shearing elements, each having a cutting edge, the cutting edge of each shearing element directly touching the cutting edge of the other. The tool is closely applied to the longitudinal surfaces of the plate to be cut, and the plate is cut by turning the two shearing elements relative to one another.

The invention possesses a considerable advantage in that the bodies can be easily cut with markedly less applied force, and that no deformation takes place outside the cut location. In addition, the cutting procedure can be carried out in a short time with a very simple device.

## Brief Description of the Drawings

The invention will be further described in connection with the accompanying drawings in which:

Fig. 1a is a perspective view of an osteosynthetic plate with a tool according to the invention schematically represented to illustrate the principle of the invention.

Fig. 1b is a schematic, perspective view showing the torsional motion of Fig. 1.

Fig. 1c is a schematic perspective view of the tool of Figs. 1a and 1b, showing the osteosynthetic plate with its cut upper part lifted off.

Fig. 2a is a schematic perspective view of an embodiment of the invention, including two round discs each having a slit and a lever arm.

Fig. 2b is a schematic view of an osteosynthetic plate with the tool of Fig. 2a attached.

Fig. 2c is a schematic view of an osteosynthetic plate with the tool of Fig. 2a attached, illustrating the cutting procedure.

Fig. 3 is a schematic perspective view of another embodiment of the invention using two forceps.

Fig. 4 is a schematic perspective view of a further embodiment of the invention including a tool with a holder and a disc with a cutting slot.

Fig. 5 is a schematic perspective view, partly broken away, of the tool of Fig. 4.

Fig. 6 is a schematic perspective view of yet a further embodiment of the invention having cylindrical shearing parts.

## Detailed Description of the Preferred Embodiments

In the schematic representation of Figs. 1a-1c, each of the upper part 1 and the lower part 2 of a tool according to the invention is shown as two rectangular blocks 1', 1'', 2' and 2''. Each block 1', 1'', 2', 2'' is bevelled to form a sharp cutting edge 6. As shown in Fig. 1a, the cutting edges of the blocks in the upper part 1 touch directly the cutting edges of the lower part 2. These cutting edges are brought as closely as possible to the area 7 of the plate 3 to be cut. Preferably, the plate 3 has grooves or division lines 9 to which the cutting edges of the tool may be applied.

The plate 3 is shown as a bone plate useful in osteosynthesis, rectangular in cross section and having holes or recesses 10 for bone screws.

In accordance with the invention, to cut the plate 3, one (or both) of the blocks 1 and 2 are rotated relative to one another by more than 15° about the longitudinal axis 4 of the plate or other object to be cut, which is generally perpendicular to the plane of rotation 8 of the shearing device. This is illustrated in Fig. 1b where the upper block 1 has been rotated 90° relative to block 2 severing the upper part of plate 3. In Fig. 1c, the upper part is shown being detached from the remainder of the plate.

Figs. 2a-2c show a specific form of the invention in which the shearing elements are circular discs. Referring to Fig. 2a, 1a and 2a depict the upper and lower shearing elements which have a disc-shaped form 16. The cutting edges 6a <sup>are formed by</sup> ~~consist of~~ a slot 12

a that tapers down or narrow<sup>s</sup> in the direction of the center of the elements 1a and 2a. For exerting torsional force, lever arms 11 are attached to the elements 1a and 2a.

In Fig. 2b, plate 3a is inserted in slot 12 (which has a cutting edge 6a) of the lower shearing element 2a. The longitudinal axis 4a of the plate 3a again is approximately perpendicular to turning plane 8a.

a In Fig. 2c, shearing elements 1a, 2a are positioned surface-to-surface with each other. Counterclockwise turning of the lever arm~~s~~ 11 of element 2a, with element 1a held fast or turned clockwise results in torsional cutting according to the invention.

In another embodiment of the invention, the cutting elements are the blades of two pair of cutting forceps. Referring to Fig. 3, the forceps 13, 14 grip with their cutting edges 6b into the dividing lines (not shown) of plate 3b, with the cutting edges 6b again to be brought into direct contact with each other on the longitudinal surfaces of plate 3b. Counterturning motion of the tensioned forceps 13, 14 leads to the desired torsion separation. A mechanical holding device 22 on the manual grip prevents the forceps from opening during the turning.

The tool shown in Figs. 4 and 5 comprises a clamping mechanism 30 and a cutting unit 16 which is of the same general nature as that shown in Figs. 2a-2c. As shown, the cutting unit 16 is inserted into a space 31 between a U-shaped entrance frame 17 and the casing 15 of clamping mechanism 30. As shown in Figs. 4 and 5, a plate 3c to be cut is inserted through the U-shaped

frame 17 through the aperture<sup>§ 12</sup> in cutting unit 16 and then into the clamping unit 30 through aperture 32.

The clamping mechanism according to Figs. 4 and 5 includes a sliding assembly 22a and a clamping unit 18. The sliding assembly 22a comprises a slide 22b and an orthogonally oriented cylindrical rod 22c. The clamping unit 18 comprises a cylindrical sleeve 18b, a square clamp shoe 18a and bolts 18c. Bolts 18c, only one of which is shown, extend from each side of shoe 18a and ride in curved slots 23 in the interior wall of casing 15.

The sliding assembly 22a and clamping unit 18 are positively connected to each other. This is accomplished through a rod 22c which is telescopically seated in a sleeve 18b which in turn is attached to clamp shoe 18a. Rod 22c is seated in a socket in slide 22b and rides in a slot 24 in the upper surface of casing 15. When the sliding unit 22a has reached the right end of slot 24 the clamping unit 18 is forced to run up the curved slot 23 and releases the plate 3c. When the sliding unit 22a reaches the left end 25 of slot 24, the rod 22c is fully drawn out of shoe 18b and secures the plate 3c against longitudinal translation.

In Fig. 5 the clamping mechanism is shown in the closed state. If sliding assembly 22a is drawn backwards, clamping mechanism 18 runs up on the clamping curve 23 because it is positively connected to the sliding unit 22a. The rod 22c is then driven into the shoe 18b telescopically. A slight torsion cannot be prevented, but this is not deleterious for cutting quality because the true cut occurs at the edges of the plate

*aperture 32*

*a* ~~insertion hole 25~~ and is performed by the plate cutting unit 16  
*1* and the thrust-bearing casing 15 which is placed on a flat surface.

*a* Still a further embodiment of the invention is shown in Fig. 6. Referring to Fig. 6, a first shearing element 19 and a second shearing element 20, are each provided with a manual grip 21. A plate 3d is clamped by closing a tension mechanism or clamping device 18<sup>d</sup> by turning motion of the first shearing element 19. This occurs because clamping shoe 18d is connected by means of a pin 26 with the front shearing element 19 which in turn is rotatively positioned on the handles 21. If element 19 is torsioned relative to handles 21, the pin 26 follows an eccentric curve 27 which is cut into the clamping shoe 18d and clamps the plate 3<sup>d</sup> after a certain relative torsion. The second shearing element 20 has a similar clamping device (not shown) and is positioned to adjoin the first shearing element 19. Likewise, by means of a turning motion, second shearing element 20 is clamped to the plate 3d. Then, by a counter torsional rotation of manual grips 21, plate 3 is separated.

*a* During the turning motion, it would be advantageous to make provision, using a device configured in any manner (not shown in the drawings), so that the shearing elements would not be able to move away from each other. Also, use of such a device will allow the torque required for separating the body to be transmitted further via manual or mechanical drives to the shearing elements. In principle, it is possible that one or both shearing elements could be a component of such a device.

What is claimed is:

1. Process for cutting a cylindrical or prismatic body having a non-circular cross-section which comprises applying torsional cutting force to said body.

2. The process claimed in claim 1 wherein the body is an orthopaedic plate.

3. The process claimed in claim 1 wherein the body has grooves in its surface and a cutting tool is inserted into a groove to develop the torsional cutting force.

4. Process for cutting a body having a non-circular cross-section which comprises fixing a first sharp cutting element on a surface of the body, fixing a second sharp cutting element on said surface in direct contact with the first cutting element and rotating said elements in opposite direction relative to one another whereby the body is severed by a torsional cutting process.

5. The process claimed in claim 3 wherein the body has a longitudinal axis and the cutting elements are rotated about said axis.

6. A tool for cutting a body having a non-circular cross-section comprising an upper shearing element and a lower shearing element, each of said shearing elements having cutting edges, (said edges directly touching one another and said tool further comprising means for rotating said elements counter to one another.

7. The tool claimed in claim 6 wherein the shearing elements each comprises a disc having a slot with a cutting edge,

extending from the outer periphery of the disc toward the center (and narrowing toward the center) and a handle (attached to each of said discs.

SUBB2  
8. The tool claimed in claim 6 wherein each shearing element comprises a forceps having jaws with cutting edges.

9. A tool for cutting a body having a non-circular cross-section comprising a holder, having a front surface, a guide ring attached to said holder and spaced from said front surface and a clamping device in said front surface to receive the body to be cut, in combination with a disc having a handle and a cutting slot extending from its periphery toward its center, said disc being dimensioned to fit between said guide ring and said front surface and to engage a body held in said clamping device, counter rotation of said holder and said disc causing cutting of said body.

10. A tool for cutting a body having a non-circular cross-section comprising a first holder having a front face, a second holder having a front face, clamping means having cutting edges in the front face of each of said holders, said holders being positionable with their front faces in contact, and hand grips on said holders whereby said holders can be rotated in opposite directions to cut a body in said clamping means.

11. A body having a non-circular cross-section manufactured by the process of claim 1.



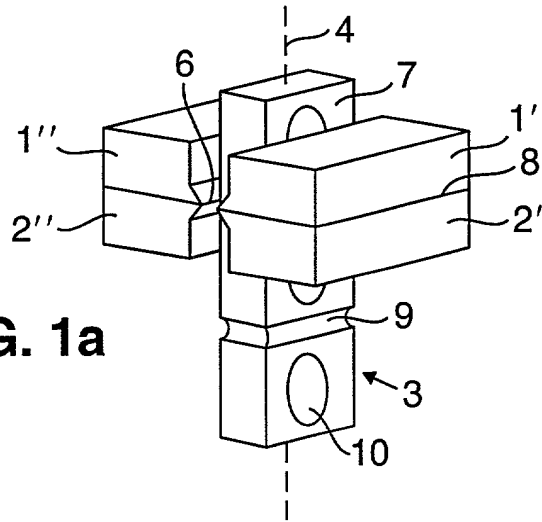


FIG. 1a

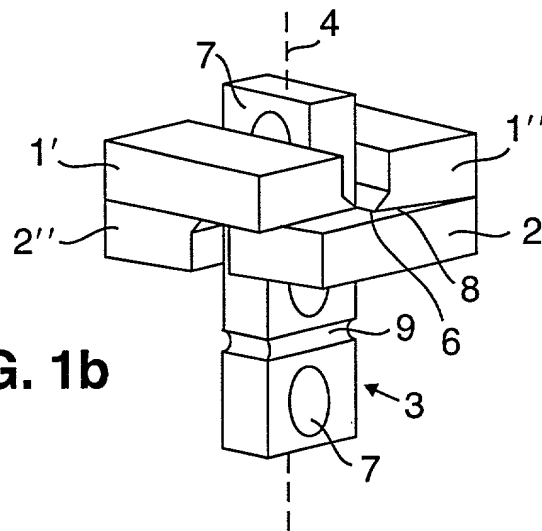


FIG. 1b

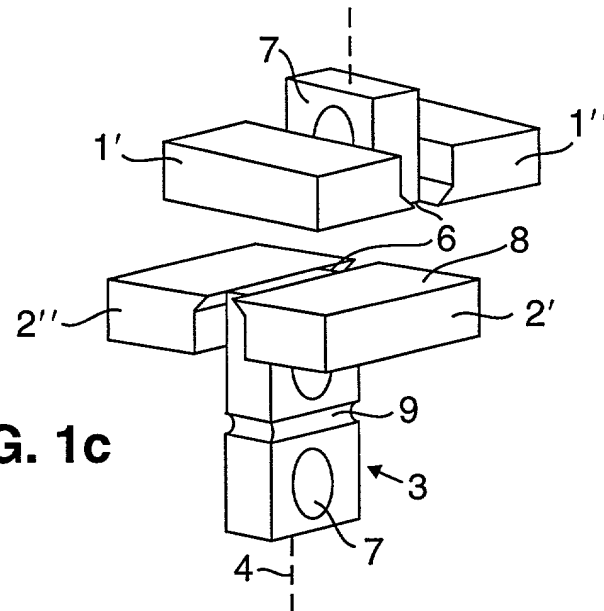


FIG. 1c

FIG. 2a

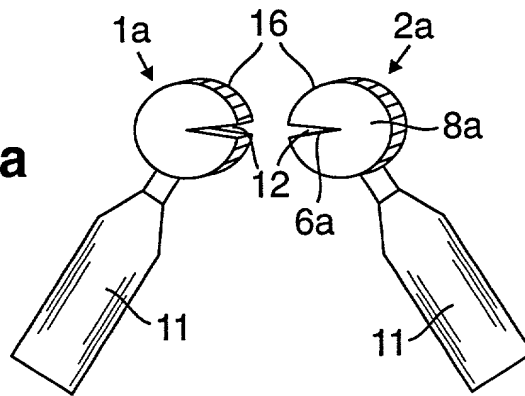


FIG. 2b

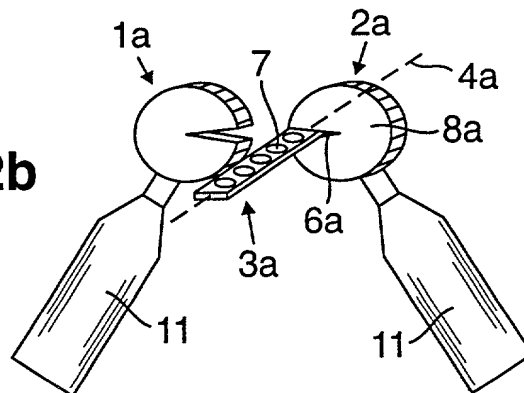
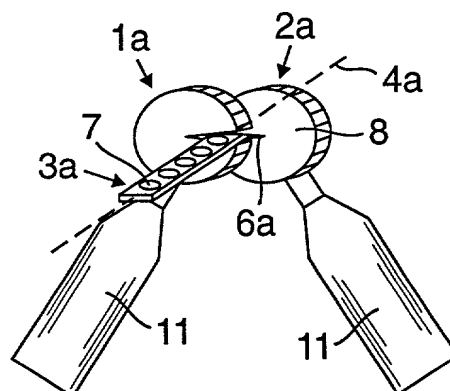
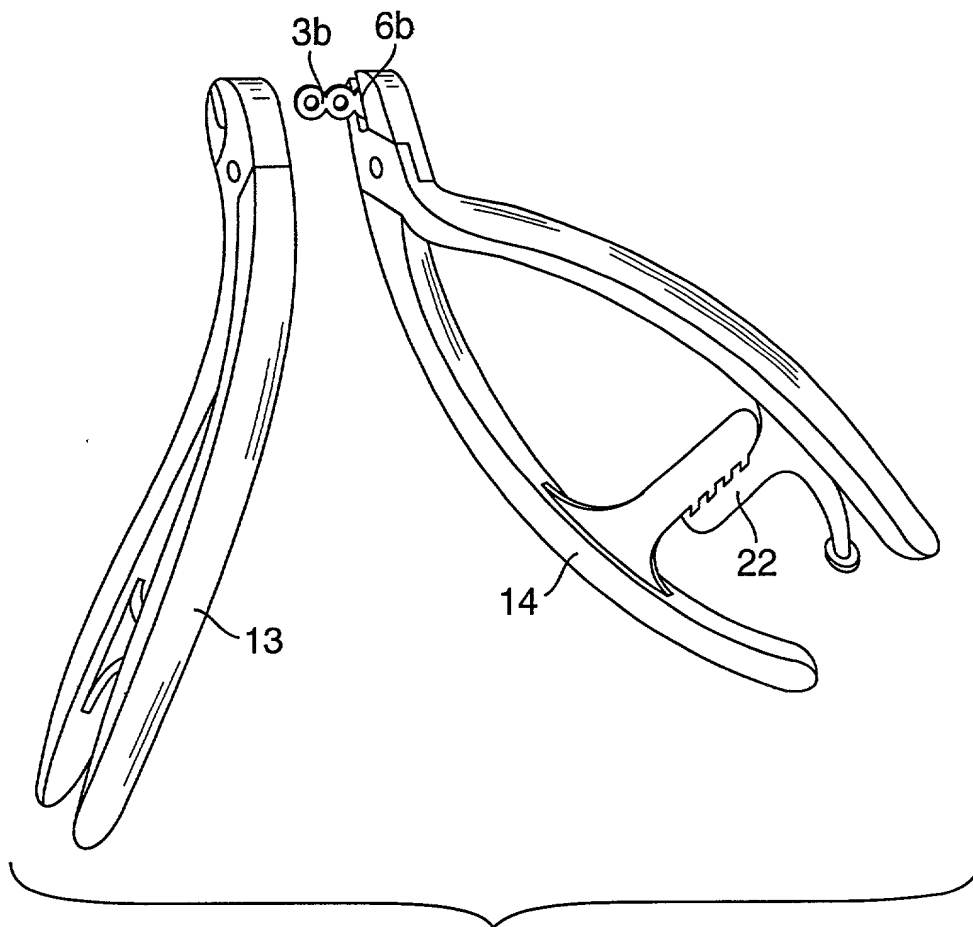


FIG. 2c



**FIG. 3**

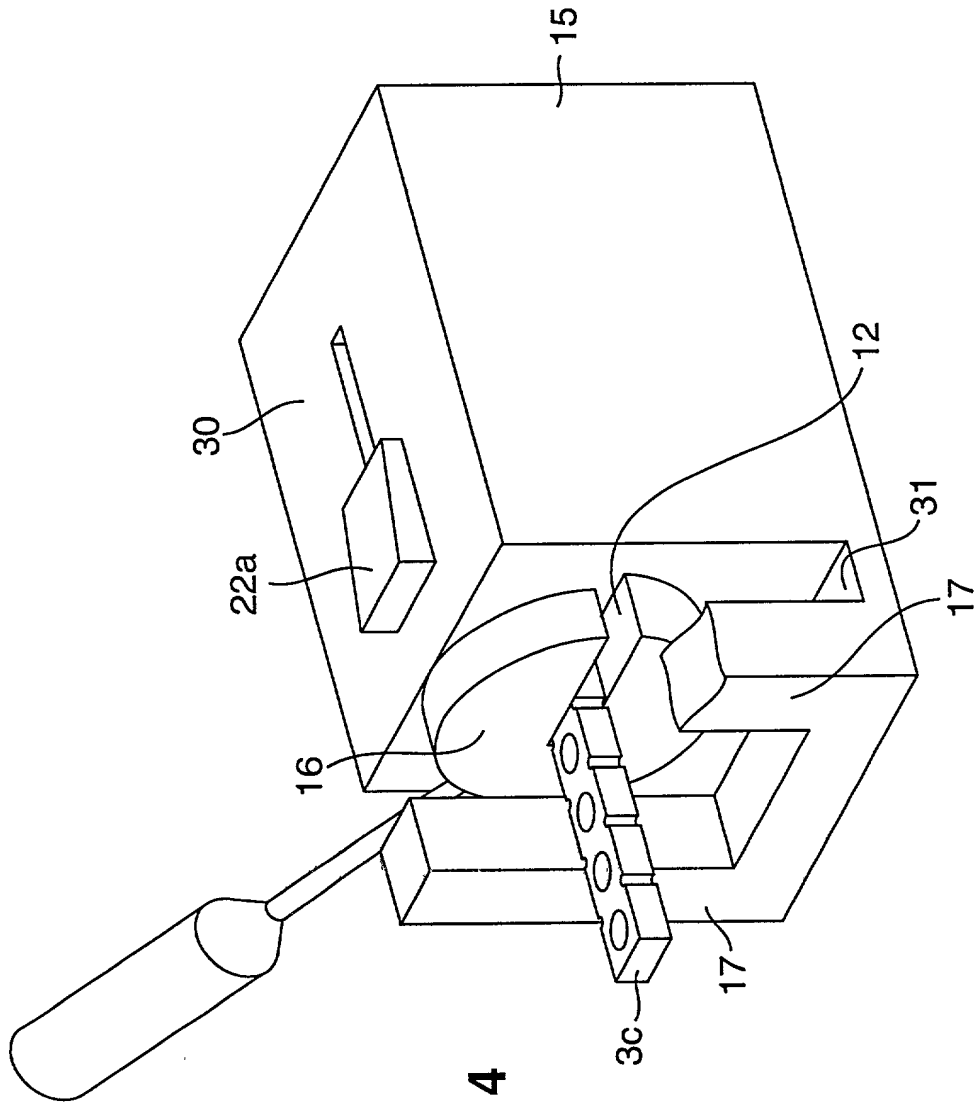


FIG. 4

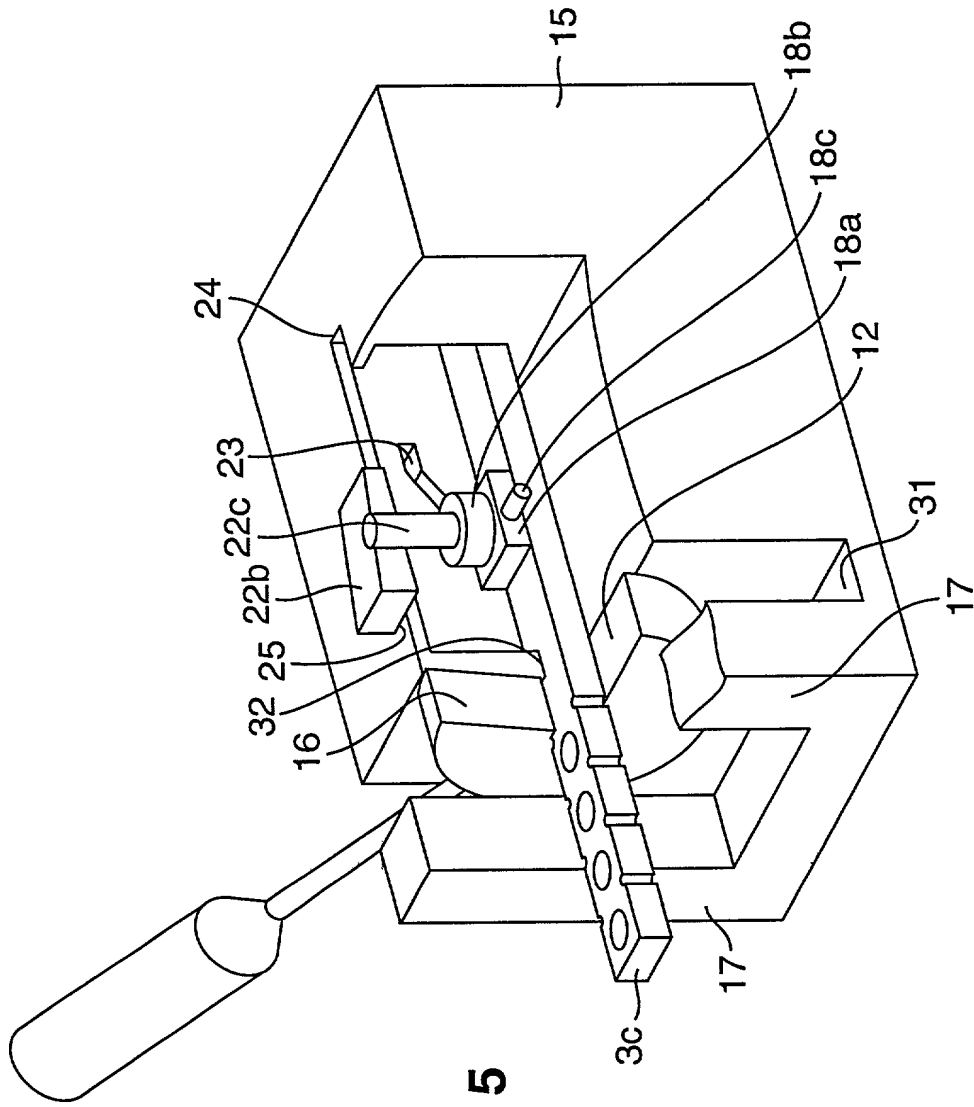


FIG. 5

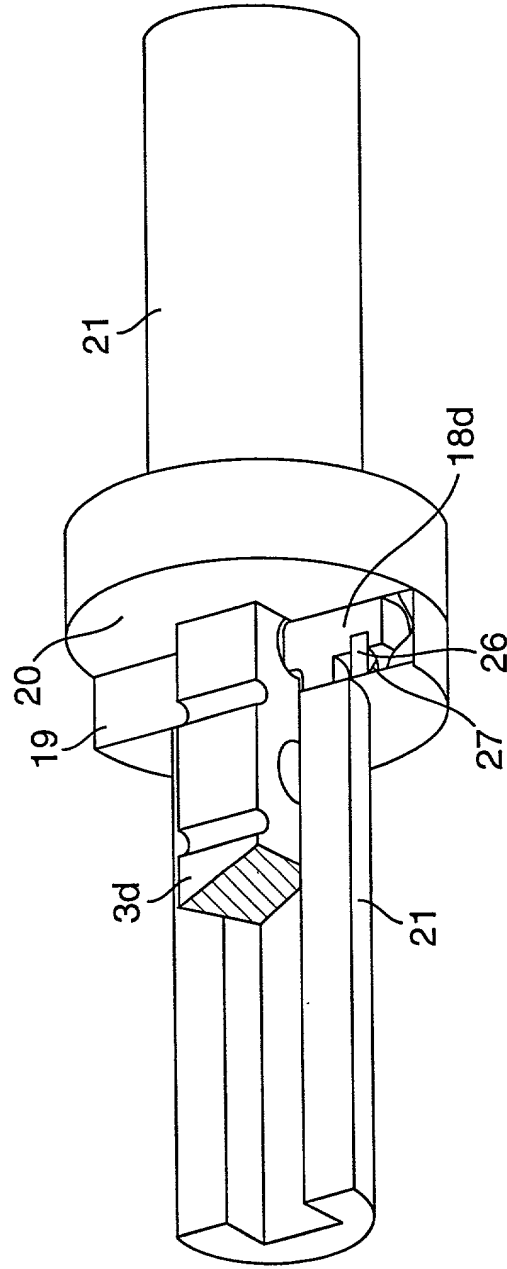


FIG. 6

Attorney's Docket No. 07807/088001**COMBINED DECLARATION AND POWER OF ATTORNEY**(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL,  
CONTINUATION OR CIP)

As a below named inventor, I hereby declare that:

**TYPE OF DECLARATION**

This declaration is of the following type: (check one applicable item below)

- ☐ original
- ☐ design
- ☐ supplemental

NOTE: If the declaration is for an International Application being filed as a divisional, continuation or continuation-in-part application, do not check next item; check appropriate one of last three items.

- ☐ national stage of PCT

NOTE: If one of the following 3 items apply, then complete and also attach ADDED PAGES FOR DIVISIONAL, CONTINUATION OR CIP.

- ☐ divisional
- ☐ continuation
- ☒ continuation-in-part (CIP)

**INVENTORSHIP IDENTIFICATION**

WARNING: If the inventors are each not the inventors of all the claims, an explanation of the facts, including the ownership of all the claims at the time the last claimed invention was made, should be submitted.

My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**TITLE OF INVENTION**

METHOD AND APPARATUS FOR CUTTING BODIES HAVING A NON-  
CIRCULAR CROSS SECTION

**SPECIFICATION IDENTIFICATION**

the specification of which: (complete (a), (b) or (c))

- (a) ☒ is attached hereto.
- (b) ☐ was filed on \_\_\_\_\_ as ☐ Serial No. 0 / \_\_\_\_\_  
or ☐ Express Mail No., as Serial No. not yet known \_\_\_\_\_  
and was amended on \_\_\_\_\_ (if applicable).

NOTE: Amendments filed after the original papers are deposited with the PTO which contain new matter are not accorded a filing date by being referred to in the declaration. Accordingly, the amendments involved are those filed with the application papers or, in the case of a supplemental declaration, are those amendments claiming matter not encompassed in the original statement of invention or claims. See 37 CFR 1.67.

- (c) ☐ was described and claimed in PCT International Application No. \_\_\_\_\_ filed on \_\_\_\_\_ and as amended under PCT Article 19 on \_\_\_\_\_ (if any).

## ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information

- ☒ which is material to patentability as defined in 37, Code of Federal Regulations, § 1.56

*(also check the following items, if desired)*

- ☒ and which is material to the examination of this application, namely, information where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent, and
- ☐ In compliance with this duty there is attached an information disclosure statement in accordance with 37 CFR 1.98.

## PRIORITY CLAIM (35 U.S.C. § 119)

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

*(complete (d) or (e))*

- (d) ☐ no such applications have been filed.
- (e) ☒ such applications have been filed as follows.

NOTE: Where item (c) is entered above and the International Application which designated the U.S. itself claimed priority check item (e), enter the details below and make the priority claim.

### A. PRIOR FOREIGN/PCT APPLICATION(S) FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS APPLICATION AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. § 119

COUNTRY (OR INDICATE IF PCT)	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 37 USC 119
Switzer- land	02 457/94-2	08.08.94	<input checked="" type="checkbox"/> YES NO <input type="checkbox"/>
			<input type="checkbox"/> YES NO <input type="checkbox"/>
			<input type="checkbox"/> YES NO <input type="checkbox"/>
			<input type="checkbox"/> YES NO <input type="checkbox"/>
			<input type="checkbox"/> YES NO <input type="checkbox"/>



**ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS  
(6 MONTHS OR DESIGN) PRIOR TO THIS U.S. APPLICATION**

NOTE: If the application filed more than 12 months from the filing date of this application is a PCT filing forming the basis for this application entering the United States as (1) the national stage, or (2) a continuation, divisional, or continuation-in-part, then also complete ADDED PAGES TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR DIVISIONAL, CONTINUATION OR CIP APPLICATION for benefit of the prior U.S. or PCT application(s) under 35 U.S.C. § 120.

**POWER OF ATTORNEY**

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (List name and registration number)

Caspar C. Schneider, Jr., Reg. No. 16,676

(check the following item, if applicable)

- ☐ Attached as part of this declaration and power of attorney is the authorization of the above-named attorney(s) to accept and follow instructions from my representative(s).

SEND CORRESPONDENCE TO  
Caspar C. Schneider, Jr.  
Fish & Richardson P.C.  
Suite 2800  
45 Rockefeller Plaza  
New York, NY 10111

DIRECT TELEPHONE CALLS TO:  
(Name and telephone number)

Caspar C. Schneider, Jr.  
(212) 765-5070

**DECLARATION**

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

## SIGNATURE(S)

NOTE: Carefully indicate the family (or last) name as it should appear on the filing receipt and all other documents.

Full name of sole or first inventor

Peter

(GIVEN NAME)

(MIDDLE INITIAL OR NAME)

L Bauer

FAMILY (OR LAST NAME)

Inventor's signature P. Bauer

Date 20.4.96

Country of Citizenship

Switzerland

Residence

Basel

Switzerland

CHX

Post Office Address

Hofstetter Strasse 8, CH-4054 Basel,

Switzerland

Full name of second joint inventor, if any

Herbert

(GIVEN NAME)

(MIDDLE INITIAL OR NAME)

L Happe

FAMILY (OR LAST NAME)

Inventor's signature H. Happe

Date 15.4.96

Country of Citizenship

Germany

Residence

Lippstadt, Germany

DEX

Post Office Address

Alte Schmiede 21, 59558 Lippstadt,

Germany

Wallensteinstraße 7, 59555 Lippstadt

Full name of third joint inventor, if any

(GIVEN NAME)

(MIDDLE INITIAL OR NAME)

FAMILY (OR LAST NAME)

Inventor's signature

Date

Country of Citizenship

Residence

Post Office Address

CHECK PROPER BOX(S) FOR ANY OF THE FOLLOWING ADDED PAGE(S) WHICH  
FORM A PART OF THIS DECLARATION

- ☐ Signature for third and subsequent joint inventors. *Number of pages added*  
\_\_\_\_\_

\* \* \*

- ☐ Signature by administrator(trix), executor(trix) or legal representative for de-  
ceased or incapacitated inventor. *Number of pages added* \_\_\_\_\_

\* \* \*

- ☐ Signature for inventor who refuses to sign or cannot be reached by person  
authorized under 37 CFR 1.47. *Number of pages added* \_\_\_\_\_

\* \* \*

- ☐ Added page for signature by one joint inventor on behalf of deceased inventor(s)  
where legal representative cannot be appointed in time (37 CFR 1.47).

\* \* \*

- ☒ Added pages to combined declaration and power of attorney for divisional,  
continuation, or continuation-in-part (C-I-P) application.

☒ Number of pages added 2

\* \* \*

- ☐ Authorization of attorney(s) to accept and follow instructions from representative.

\* \* \*

*(If no further pages form a part of this Declaration, then end this Declaration with  
this page and check the following item:)*

- ☐ This declaration ends with this page.

**ADDED PAGE TO COMBINED DECLARATION AND POWER OF ATTORNEY  
FOR DIVISIONAL, CONTINUATION OR CIP APPLICATION**

*(complete this part only if this is a divisional, continuation or CIP application)*

**CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S) UNDER 35 U.S.C. 120**

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 USC 120:					
U.S. APPLICATIONS			Status ( <i>Check one</i> )		
U.S. APPLICATIONS	U.S. FILING DATE		Patented	Pending	Abandoned
1.08 / 508,255	07/27/95			x	
2.0 / _____					
3.0 / _____					
PCT APPLICATIONS DESIGNATING THE U.S.					
PCT APPLI- CATION NO.	PCT FILING DATE	U.S. SERIAL NOS. ASSIGNED (if any)			
4. _____					
5. _____					
6. _____					

35 USC 119 PRIORITY CLAIM, IF ANY, FOR ABOVE LISTED U.S./PCT APPLICATIONS

ABOVE APPLICATION NO.	DETAILS OF FOREIGN APPLICATION FROM WHICH PRIORITY CLAIMED UNDER 35 USC 119		
	Country Application No.	Date of filing (day, month, year)	Date of issue (day, month, year)
1.	Switzerland 02 457/94-2	08.08.94	20.04.95
2.			
3.			
4.			
5.			
6.			